

53. An isolated polynucleotide encoding a protease of claim 48.
54. The polynucleotide of claim 53, which has a nucleic acid sequence of SEQ ID NO: 11.
55. A nucleic acid construct comprising the polynucleotide of claim 54 operably linked to one or more control sequences that direct the production of the protease in a suitable expression host.
56. A recombinant expression vector comprising the nucleic acid construct of claim 55, a promoter, and transcriptional and translational stop signals.
57. A recombinant host cell comprising the nucleic acid construct of claim 55.
58. A method for producing a protease comprising
- (a) cultivating the recombinant host cell of claim 57 under conditions suitable for production of the protease; and
 - (b) recovering the protease.
59. A modified protease, comprising one or more of the following mutations in the amino acid sequence of a parent protease:
- (a) at least one Asn and/or Gly in an Asn-Gly sequence has been modified by substitution, deletion and/or insertion to change or remove said Asn-Gly sequence;
 - (b) a substitution or deletion of any Glu and/or Asp;
 - (c) a substitution of the amino acid occupying the first and/or second position following any Glu or Asp with Pro;
 - (d) a substitution or deletion of any amino acid susceptible to oxidation;
 - (e) a substitution or deletion of any Trp at the surface; and
 - (f) a substitution of any Tyr at the surface;
- wherein the parent protease has an amino acid sequence comprising amino acids 1-215 of SEQ ID NO: 12 or a fragment thereof that has protease activity.

60. The modified protease of claim 59, comprising a modification of at least one Asn and/or Gly in an Asn-Gly sequence by substitution, deletion and/or insertion to change or remove said Asn-Gly sequence.

61. The modified protease of claim 60, comprising a substitution of Asn and/or Gly in an Asn-Gly sequence with A, P, Q, S, T or Y.

62. The modified protease of claim 60, comprising one or more of the following mutations

N45{*,A,Q,S,P,T,Y};

N45{*,A,Q,S,P,T,Y}+G46{*,A,Q,S,P,T,Y};

N45{*,A,Q,S,P,T,Y}+N74{*,A,Q,S,P,T,Y};

N45{*,A,Q,S,P,T,Y}+N74{*,A,Q,S,P,T,Y}+N187{*,A,Q,S,P,T,Y};

N45{*,A,Q,S,P,T,Y}+N74{*,A,Q,S,P,T,Y}+N187{*,A,Q,S,P,T,Y}+N192{*,A,Q,S,P,T,Y};

N45{*,A,Q,S,P,T,Y}+N74{*,A,Q,S,P,T,Y}+N192{*,A,Q,S,P,T,Y};

N45{*,A,Q,S,P,T,Y}+N187{*,A,Q,S,P,T,Y};

N45{*,A,Q,S,P,T,Y}+N187{*,A,Q,S,P,T,Y}+N192{*,A,Q,S,P,T,Y};

N45{*,A,Q,S,P,T,Y}+N192{*,A,Q,S,P,T,Y};

G46{*,A,Q,S,P,T,Y};

N74{*,A,Q,S,P,T,Y};

N74{*,A,Q,S,P,T,Y}+G75{*,A,Q,S,P,T,Y};

N74{*,A,Q,S,P,T,Y}+N187{*,A,Q,S,P,T,Y};

N74{*,A,Q,S,P,T,Y}+N187{*,A,Q,S,P,T,Y}+N192{*,A,Q,S,P,T,Y};

N74{*,A,Q,S,P,T,Y}+N192{*,A,Q,S,P,T,Y};

G75{*,A,Q,S,P,T,Y};

N187{*,A,Q,S,P,T,Y};

N187{*,A,Q,S,P,T,Y}+N192{*,A,Q,S,P,T,Y};

G188{*,A,Q,S,P,T,Y};

N192{*,A,Q,S,P,T,Y};

N192{*,A,Q,S,P,T,Y} + G193{*,A,Q,S,P,T,Y}; and

G193{*,A,Q,S,P,T,Y}.

63. The modified protease of claim 59, comprising a substitution or deletion of any Glu and/or Asp.

64. The modified protease of claim 63, comprising the substitution of any Glu or Asp with Ala.
65. The modified protease of claim 64, comprising E81A, E143A, E151A, E202A, D5A, D6A, D69A, D96A, D103A, D135A, D152A, D161A, and/or D173A.
66. The modified protease of claim 59, comprising a substitution of the amino acid occupying the first and/or second position following any Glu or Asp with Pro.
67. The modified protease of claim 59, comprising a substitution or deletion of any amino acid susceptible to oxidation;
68. The modified protease of claim 67, wherein the amino acid susceptible to oxidation is methionine.
69. The modified protease of claim 68, comprising a substitution of methionine with A, E, I, K, L, N, Q, or S.
70. The modified protease of claim 69, comprising one or more of M67{*,S,A,N,Q,K}; M79{*,S,A,N,Q,K}; M137{*,S,A,N,Q,K}; M144{*,S,A,N,Q,K}; and M171{*,S,A,N,Q,K}.
71. The modified protease of claim 59, comprising a substitution or deletion of any Trp at the surface.
72. The modified protease of claim 71, comprising a substitution of any said Trp with F, G, Q, or T.
73. The modified protease of claim 71, comprising W142{F,G,Q,T,}.
74. The modified protease of claim 59, comprising a substitution of any Tyr at the surface....
75. The modified protease of claim 74, comprising a substitution of Tyr with Phe or Trp.

76. The modified protease of claim 74, comprising a substitution of Tyr at position 19, 24, 50, 57, 64, 83, 88, 95, 112, 132, 157, 158, 186, and/or 206.

77. The modified protease of claim 76, comprising

Y19{F,W}

Y24{F,W}

Y50{F,W}

Y57{F,W}

Y64{F,W}

Y83{F,W}

Y88{F,W}

Y95{F,W}

Y112{F,W}

Y132{F,W}

Y157{F,W}

Y158{F,W}

Y186{F,W} and/or

Y206{F,W}.

78. A detergent composition comprising a modified protease of claim 59 and a surfactant.

79. The detergent composition of claim 78, further comprising at least one further enzyme selected from the group consisting of amylase, cellulase, lipase, oxidase, peroxidase, or another protease.

80. An isolated polynucleotide encoding a modified protease of claim 59.

81. A nucleic acid construct comprising the polynucleotide of claim 80 operably linked to one or more control sequences that direct the production of the protease in a suitable expression host.

82. A recombinant expression vector comprising the nucleic acid construct of claim 81, a promoter, and transcriptional and translational stop signals.

83. A recombinant host cell comprising the nucleic acid construct of claim 81.
84. A method for producing a modified protease comprising
- (a) cultivating the recombinant host cell of claim 83 under conditions suitable for production of the modified protease; and
 - (b) recovering the modified protease.
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